

Math 356 Syllabus

Instructor: Anastassia Etropolski

Office: HBH 412

Classroom: HBH 427

Main Text: Abstract Algebra, 3rd Edition by Dummit & Foote

E-mail: aetropolski@rice.edu

Class Time: MWF 1:00 - 1:50

Office Hours: Tu 1:30 - 2:30, F 10 - 11:30

Course Description & Aims

This course serves as both an introduction to Abstract Algebra as a whole, and more specifically as a course on the theory of abstract groups. Groups are mathematical structures which arise naturally when studying sets, and I hope to convey this to you over the course of the semester with examples and applications. However, as this is a foundational course, a lot of emphasis will be placed on mathematical rigor. Make no mistake: We are here to learn the nitty gritty of group theory. That being said, this is also a space where you should feel comfortable being confused and asking questions, and I encourage you all to ask questions during lectures.

Text

The text we will be using is the 3rd edition of Abstract Algebra by Dummit & Foote. This is a book beloved by many, myself included, but brevity is not one of its virtues. We will not cover every single page during lectures, as it is filled with examples, so I encourage you to fill in the blanks between lectures. This course will focus on Part I, specifically Chapters 1 - 5. If you continue on to Math 463 (Algebra II) next semester, you will find Parts II, III, and IV a valuable resource, whether or not you use this same textbook.

Website

The course webpage can be found here:

<http://math.rice.edu/~ae22/356S19.html>

I will post homework assignments and exams on the website, as well as a detailed syllabus of which topics we will be covering as the semester progresses.

Homework

Homework will be assigned/collected every **Wednesday**. You are encouraged to work together to solve the problems, but you are expected to turn in your own work. **Do not search the internet for solutions to the homework.** This will only cheat you out of a learning opportunity. If you are completely stuck, you should either e-mail me or come to my office hours. See the office hours section below.

This course places a great deal of emphasis on proof writing, so your homework will be graded both on accuracy and clarity.

Exams

There will be two midterm exams and a final exam in this class. All of the exams will be take-home and open book. You may only use your notes and your textbook, and you may not work on the problems with anyone else. The midterms will take the place of a homework assignment, roughly in the first half of February and in the second half of March, depending on how we progress through the material.

Grading Policy

The grading scheme is as follows:

Homework: 35%* Midterm Exam: 40% (20% each) Final Exam: 25%

* The lowest two homework grades will be dropped.

Course policies & resources

Attendance: You are expected to attend class every day, however there is no penalty for absences.

Honor Code: Students are expected to abide by the Rice Honor Code when working on homework and exams. As stated earlier, collaboration with other students is encouraged on homework, but is not allowed on exams. You are expected to only consult the text, your notes, and/or extra material posted to the course website.

Office Hours: My office hours are designed to be a time when any student can feel free to come by to talk with me about the course. You do not need to inform me that you are coming, and you do not even need to have specific questions ready for me to answer. For example, you should feel free to come by if you're stuck on a homework problem, or if you had trouble following a lecture.

If you cannot make it to my office hours, feel free to e-mail me to set up a time to meet, or just e-mail me your questions. I will respond as soon as I get a chance, and I prefer you come to me with your questions rather than scouring the internet for the solution.

Disability Support: Students who think they may need accommodations in this course because of the impact of a disability should give me a written letter from Disability Support Services within the first two weeks of the course.